

I. AMENDMENTS

A. In the Specification

Preliminarily, on page 1 of the specification, please replace the first paragraph with the following paragraph:

--This application is a divisional application of U.S. Application Serial No. 09/575,847 filed May 19, 2000, now issued as U.S. patent 6,593,135; which is a continuation-in-part of U.S. Application Serial No. 08/974,737 filed November 19, 1997, now issued as U.S. patent 6,077,707; which is a continuation of U.S. Application Serial No. 08/911,825 filed August 15, 1997, now issued as U.S. patent 6,054,321; which is a continuation-in-part of U.S. Application Serial No. 08/706,408 filed August 30, 1996, now issued as U.S. patent 6,124,128; which claims priority under 35 USC § 119(e) of U.S. Application Serial No. 60/024,050 filed August 16, 1996, now abandoned. The disclosure of each of the prior applications is considered part of and is incorporated by reference in the disclosure of this application.--

Please replace the paragraph starting on page 5, line 23, with the following paragraph:

--Figs. 5-1 to 5-46 present the coordinates for the crystal structure of *Aequorea*-related green fluorescent protein S65T.--

Please replace the paragraph starting on page 12, line 26, with the following paragraph:

--In another embodiment, this invention provides a computational method of modeling the three dimensional structure of a fluorescent protein comprising determining a three dimensional relationship between at least two atoms listed in the atomic coordinates of Figs. 5-1 to 5-46.--

Please replace the paragraph starting on page 12, line 30, with the following paragraph:

--In another embodiment, this invention provides a device comprising a storage device and, stored in the device, at least 10 atomic coordinates selected from the atomic coordinates listed in Figs. 5-1 to 5-46. In one embodiment, the storage device is a computer readable device that stores code that receives as input the atomic coordinates. In another embodiment, the computer readable device is a floppy disk or a hard drive.--

Please replace the paragraph starting on page 34, line 1, with the following paragraph:

--The invention also includes computer related embodiments, including computational methods of using the crystal coordinates for designing new fluorescent protein mutations and devices for storing the crystal data, including coordinates. For instance, the invention includes a device comprising a storage device and, stored in the device, at least 10 atomic coordinates selected from the atomic coordinates listed in Figs. 5-1 to 5-46. More coordinates can be stored depending on the complexity of the calculations or the objective of using the coordinates (e.g. about 100, 1,000, or more coordinates). For example, the number coordinates will be desirable for more detailed representations of fluorescent protein structure. Typically, the storage device is a computer readable device that stores code that it receives as input to atomic coordinates, although other storage means as known in the art are contemplated. The computer readable device can be a floppy disk or a hard drive.--